Amendments to the Claims

1.   (Currently amended) A method of managing an event toggling between first and second event states in a network management system, said method comprising:

> listing said event and a last state change time of said event in a hysteresis table, if said event is not already listed in said hysteresis table;

determining if said event maintains one of said first and second states for a predetermined amount of time, wherein:

> > if said last state change time of said event plus said predetermined amount of time is not less than current time, then said event is deemed unstable and remains listed in said hysteresis table; and

> > if said last state change time plus said predetermined amount of time is less than the current time, then said event is deemed stable and is removed from said hysteresis table; and

reporting said event as having one of said first and second states only after said one of said first and second states is maintained for said predetermined amount of time, wherein said reporting said event as having said one of said first and second states comprises reporting said event as achieving said one of said first and second states at ~~the actual time of occurrence of a~~said last state change ~~time~~ of said event.

2.   (Original) A method according to claim 1, wherein said event is an alarm.

3.   (Original) A method according to claim 2, wherein said first state is an alarm set state, and said second state is an alarm clear state.

4.   (Cancelled)

5.   (Original) A method according to claim 1, said method further comprising reporting a number of times said event toggled between said first and second states.

6.   (Cancelled)

7.   (Original) A method according to claim 1, said method further comprising reporting said event as being in a toggling condition.

8.   (Original) A method according to claim 1, said method further comprising reporting said event as not being in a toggling condition.

9.   (Currently amended) A method of managing an event toggling between first and second event states in a network management system, said method comprising:

    listing said event and a last state change time of said event in a hysteresis table, if said event is not already listed in said hysteresis table;

reporting said event as having said first state;

monitoring said event to determine if said event maintains said second state for a predetermined amount of time, wherein:

    if said last state change time of said event plus said predetermined amount of time is not less than current time, then said event is deemed unstable and remains listed in said hysteresis table; and

    if said last state change time plus said predetermined amount of time is less than the current time, then said event is deemed stable and is removed from said hysteresis table; and

reporting said event as having said second state only after said second state is maintained for said predetermined amount of time, wherein said reporting said event as having said second state comprises reporting said event has achieving said second state at ~~the actual time of occurrence of a~~said last state change ~~time~~ of said event.

10.   (Original) A method according to claim 9, wherein said event is an alarm.

11.   (Original) A method according to claim 10, wherein said first state is an alarm set state, and said second state is an alarm clear state.

12.   (Cancelled).

13.   (Original) A method according to claim 9, said method further comprising reporting said number of times said event toggled between said first and second states.

14.   (Cancelled).

15.   (Original) A method according to claim 9, said method further comprising reporting said event as being in a toggling condition.

16.   (Original) A method according to claim 9, said method further comprising reporting said event as not being in a toggling condition.

17.   (Currently amended) A machine-readable medium whose contents cause a network management system to perform a method of managing an event toggling between first and second event states, said method comprising:

listing said event and a last state change time of said event in a hysteresis table, if said event is not already listed in said hysteresis table;

determining if said event maintains one of said first and second states for a predetermined amount of time, wherein:

if said last state change time of said event plus said predetermined amount of time is not less than current time, then said event is deemed unstable and remains listed in said hysteresis table; and

if said last state change time plus said predetermined amount of time is less than the current time, then said event is deemed stable and is removed from said hysteresis table; and

reporting said event as having one of said first and second states only after said one of said first and second states is maintained for said predetermined amount of time, wherein said reporting said event as having said one of said first and second states comprises reporting said event as achieving said one of

said first and second states at ~~the actual time of occurrence of a~~said last state

change time of said event.

18.   (Original) The machine readable medium of claim 17, wherein said event is

an alarm.

19.   (Original) The machine readable medium of claim 18, wherein said first

state is an alarm set state, and said second state is an alarm clear state.

20.   (Cancelled).

21.   (Original) The machine readable medium of claim 17, said method further

comprising reporting a number of times said event toggles between said first and second

states.

22.   (Cancelled).

23.   (Original) The machine readable medium of claim 17, said method further

comprising reporting said event as being in a toggling condition.

24.   (Original) The machine readable medium of claim 17, said method further

comprising reporting said event as not being in a toggling condition.

25.   (Currently amended) A network management system comprising:

a machine-readable medium whose contents cause said system to perform a method

of managing an event toggling between first and second event states, the

method comprising:

listing said event and a last state change time of said event in a hysteresis table,

if said event is not already listed in said hysteresis table;

determining if said event maintains one of said first and second states for a

predetermined amount of time, wherein:

if said last state change time of said event plus said predetermined

amount of time is not less than current time, then said event

is deemed unstable and remains listed in said hysteresis

table; and

if said last state change time plus said predetermined amount of time

is less than the current time, then said event is deemed stable

and is removed from said hysteresis table; and

reporting said event as having one of said first and second states only after said one

of said first and second states is maintained for said predetermined amount

of time, wherein said reporting said event as having said one of said first

and second states comprises reporting said event as achieving said one of

said first and second states at ~~the actual time of occurrence of a~~said last state

change ~~time~~ of said event.

26.   (Original) The system of claim 25, wherein said event is an alarm.

27.   (Original) The system of claim 26, wherein said first state is an alarm set
state, and said second state is an alarm clear state.

28.   (Cancelled).

29.   (Original) The system of claim 25, said method further comprising reporting
said number of times said event toggled between said first and second states.

30.   (Cancelled).

31.   (Original) The system of claim 25, said method further comprising reporting
said event as being in a toggling condition.

32.   (Original) The system of claim 25, said method further comprising reporting
said event as not being in a toggling condition.

33.   (Currently amended) An optical communication system comprising:

at least one transmitter for transmitting an optical signal to a receiver through an
optical information channel, at least one of said transmitter, said receiver
and said optical information channel comprising at least one apparatus for
reporting an event; and

a network management system coupled to the optical communication system for
receiving said report of said event, said network management system
comprising a machine-readable medium whose contents cause said network
management system to perform a method of managing an event toggling
between first and second event states, the method comprising:

listing said event and a last state change time of said event in a hysteresis table,
if said event is not already listed in said hysteresis table;

determining if said event maintains one of a first and a second state for a
predetermined amount of time, wherein:

if said last state change time of said event plus said predetermined
amount of time is not less than current time, then said event
is deemed unstable and remains listed in said hysteresis
table; and

if said last state change time plus said predetermined amount of time
is less than the current time, then said event is deemed stable
and is removed from said hysteresis table; and

reporting said event as having one of said first and second states only
after said one of said first and second states is maintained for
said predetermined amount of time, wherein said reporting said
event as having said one of said first and second states
comprises reporting said event as achieving said one of said first
and second states at the actual time of occurrence of a said last
state change time of said event.

34.   (Original) The system of claim 33, wherein said event is an alarm.

35.   (Original) The system of claim 34, wherein said first state is an alarm set state, and said second state is an alarm clear state.

36.   (Cancelled).

37.   (Original) The system of claim 33, said method further comprising reporting a number of times said event toggled between said first and second states.

38.   (Cancelled).

39.   (Original) The system of claim 33, said method further comprising reporting said event as being in a toggling condition.

40.   (Original) The system of claim 33, said method further comprising reporting said event as not being in a toggling condition.

41.   (New) A method according to claim 1, further comprising sending a set notification prior to said reporting, and said reporting consists of sending a clear notification.

42.   (New) A method according to claim 1, wherein said hysteresis table includes a plurality of events and corresponding last state change times, and said determining is repeated periodically to remove stable events from said hysteresis table.

43.   (New) A method according to claim 9, further comprising sending a set notification prior to said reporting, and said reporting consists of sending a clear notification.

44.   (New) A method according to claim 9, wherein said hysteresis table includes a plurality of events and corresponding last state change times, and said determining is repeated periodically to remove stable events from said hysteresis table.

45.   (New) The machine readable medium of claim 17, further comprising sending a set notification prior to said reporting, and said reporting consists of sending a clear notification.

46.   (New) The machine readable medium of claim 17, wherein said hysteresis table includes a plurality of events and corresponding last state change times, and said determining is repeated periodically to remove stable events from said hysteresis table.

47.   (New) The system of claim 25, further comprising sending a set notification prior to said reporting, and said reporting consists of sending a clear notification.

48.   (New) The system of claim 25, wherein said hysteresis table includes a plurality of events and corresponding last state change times, and said determining is repeated periodically to remove stable events from said hysteresis table.

49.   (New) The system of claim 33, further comprising sending a set notification prior to said reporting, and said reporting consists of sending a clear notification.

50.   (New) The system of claim 33, wherein said hysteresis table includes a plurality of events and corresponding last state change times, and said determining is repeated periodically to remove stable events from said hysteresis table.